IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) MAIL STOP AF
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Hiroki YOSHIDA) Group Art Unit: 2623
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Application No.: 09/605,637) Examiner: Jingge Wu
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Filed: June 28, 2000) Confirmation No.: 6560
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For: IMAGE PROCESSING FOR IMAGE)
CORRECTION)
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RESPONSE

MAR 0 3 2004

Technology Center 2600

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Claims 1, 2, 8, 10, 12, 13 and 19 have been rejected under 35 U.S.C. §102(b) as

being allegedly anticipated by U.S. Patent No. 5,309,228, hereinafter Nakamura. In the

Examiner's comments preceding the rejection, the Examiner indicates that the contents of

Table 1 on page 8 of the specification are not included in claims 1 and 10. However,

Applicant's have never argued that the preferred embodiment disclosed on page 10 of the

application should be incorporated into the claims. Instead, in the response filed on

September 9, 2003, to help the Examiner understand the significance of claims 1 and 10,

reference was made to the preferred exemplary embodiment. However, it was clearly

stated that the invention was not limited to the disclosed exemplary embodiment.

The second point argued by the Examiner prior to restating the rejection is the issue of whether or not Nakamura teaches that "characteristics of a plurality of skin colors are classified *beforehand*". The Examiner alleges that Nakamura expressly teaches using histograms to classify the colors of the input image. However, the Examiner does not address the issue as to whether or not the characteristics are classified beforehand, or during the extracting or correcting processes. Claim 1, for example, defines an image processor, "wherein characteristics of a plurality of skin colors are classified *beforehand*".

Not only does the Examiner fail to address the issue of "beforehand", in referencing Nakamura's alleged teaching of classification, the Examiner refers to column 2, lines 61-65. However, this section is within the same portion of Nakamura that the Examiner refers to for teaching the claimed area extractor. This raises the question as to whether or not the characteristics are classified beforehand or, if classified at all, whether or not it is done during the extracting or correcting procedures. In the response filed on September 9, 2003, Applicant's attorney requested the Examiner to clarify where Nakamura teaches the concept that the characteristics of a plurality of skin colors are classified beforehand, and subsequently used to extract and correct image data. Unfortunately, this issue is still not clear from the latest Official Action.

Turning attention now to claim 1, the claimed image processor includes an area extractor which extracts skin areas from input image data according to the classification (accomplished beforehand) of the characteristics of a plurality of skin colors. And, the claimed image corrector corrects image data of each of the skin areas extracted by said area extractor according to the characteristics of the skin color of each of the skin areas.

Accordingly, in the image processor according to claim 1, image data can be corrected for each of the skin areas. Therefore, when the image includes a plurality of persons, the correction can be performed for each skin area or for each person. Thus, the image can be corrected by taking characteristics of skin colors of each of the plurality of people into account.

In contrast to claim 1, Nakamura teaches that a feature image, such as a person's face is extracted and analyzed, and the extracted data is used to control the color correction filter 16. Thus, it appears that for each photo to be printed by the apparatus of Nakamura, the feature image, such as a person's face is analyzed, and as a result of that analysis, the color correction filter 16 is adjusted for the entire photograph. Accordingly, there is no teaching in Nakamura of an image corrector which corrects image data of each of the skin areas extracted by the area extractor according to the characteristics of the skin color of each of the skin areas.

Accordingly, according to the image processor of claim 1, each of the extracted skin areas can be individually corrected according to their characteristics, wherein only one correction for the entire photograph is taught by Nakamura. Accordingly, claim 1 is clearly patentable over Nakamura.

Claim 10 defines an image processing method, wherein the characteristics of a plurality of skin colors are classified beforehand, wherein the method includes extracting skin areas from input image data according to the classification of the characteristics of a plurality of skin colors, and correcting image data of each of the extracted skin areas according to the characteristics of the skin color of each of the skin areas. Accordingly,

claim 10 is also patentable over Nakamura for the reasons set forth above with respect to claim 1.

Claim 12 is an independent claim which defines a computer readable storage medium storing a computer program which includes the steps of providing classification of characteristics of a plurality of skin colors, extracting skin areas from input image data according to the classification of the characteristics of a plurality of skin colors, and correcting image data of each of the extracted skin areas according to the characteristics of the skin color of each of the skin areas. Accordingly, claim 12, and claim 13 which depends from claim 12, are also patentable over Nakamura at least for the reasons set forth above with respect to claim 1.

Claim 19 also depends from claim 12, and is thus patentable over Nakamura at least for the reasons set forth above with respect to claims 1 and 12.

Claims 9 and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Nakamura. However, claims 9 and 20 depend from claims 1 and 12, respectively, and are thus also patentable over Nakamura at least for the reasons set forth above.

Claims 7 and 18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Nakamura in view of U.S. Patent No. 5,075,788, hereinafter Funda. The Examiner appears to be relying upon Funda for its alleged teaching of the step of generating a correction curve by modifying a color histogram. Although Applicant reserves the right to challenge the Examiner's analysis of Funda, and the motivation for combining Funda with Nakamura at a later time, if necessary inappropriate, the teachings relied upon by the

Examiner in Funda do not overcome the deficiency of the rejection of Nakamura set forth above. Accordingly, claims 7 and 18 are also patentable over the cited prior art.

The Examiner has indicated that claims 3-6, 11, and 14-17 are patentable over the applied prior art.

In view of the foregoing remarks, the Examiner is respectfully urged to reconsider and withdraw the outstanding rejections. If there are any questions concerning this response, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: March 1, 2004

By: William C. Rowland
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of⠀⠀⠀⠀⠀⠀⠀)⠀⠀**MAIL STOP AF**

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Hiroki YOSHIDA⠀⠀⠀⠀⠀⠀⠀⠀⠀⠀)⠀⠀Group Art Unit: 2623

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Application No.: 09/605,637⠀⠀⠀⠀)⠀⠀Examiner: Jingge Wu

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Filed: June 28, 2000⠀⠀⠀⠀⠀⠀⠀⠀)⠀⠀Confirmation No.: 6560

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For:⠀⠀IMAGE PROCESSING FOR IMAGE⠀⠀)
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AMENDMENT/REPLY TRANSMITTAL LETTER

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Technology Center 2600

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:-

Enclosed is a reply for the above-identified patent application.

[ ]⠀⠀A Petition for Extension of Time is also enclosed.

[ ]⠀⠀A Terminal Disclaimer and the [ ] $55.00 (2814) [ ] $110.00 (1814) fee due under 37 C.F.R. § 1.20(d) are also enclosed.

[ ]⠀⠀Also enclosed is/are _____

[ ]⠀⠀Small entity status is hereby claimed.

[ ]⠀⠀Applicant(s) requests continued examination under 37 C.F.R. § 1.114 and enclose the [ ] $385.00 (2801) [ ] $770.00 (1801) fee due under 37 C.F.R. § 1.17(e).

⠀⠀⠀[ ]⠀⠀Applicant(s) requests that any previously unentered after final amendments not be entered. Continued examination is requested based on the enclosed documents identified above.

⠀⠀⠀[ ]⠀⠀Applicant(s) previously submitted ___, on ___, for which continued examination is requested.

⠀⠀⠀[ ]⠀⠀Applicant(s) requests suspension of action by the Office until at least ___, which does not exceed three months from the filing of this RCE, in accordance with 37 C.F.R. § 1.103(c). The required fee under 37 C.F.R. § 1.17(i) is enclosed.

(10/03)

[ ] A Request for Entry and Consideration of Submission under 37 C.F.R. § 1.129(a) (1809/2809) is also enclosed.

[X] No additional claim fee is required.

[ ] An additional claim fee is required, and is calculated as shown below:

AMENDED CLAIMS					
	NO. OF CLAIMS	HIGHEST NO. OF CLAIMS PREVIOUSLY PAID FOR	EXTRA CLAIMS	RATE	ADD'L FEE
Total Claims		MINUS =		× $18.00 (1202) =	
Independent Claims		MINUS =		× $86.00 (1201) =	
If Amendment adds multiple dependent claims, add $290.00 (1203)					
Total Claim Amendment Fee					
If small entity status is claimed, subtract 50% of Total Claim Amendment Fee					
TOTAL ADDITIONAL CLAIM FEE DUE FOR THIS AMENDMENT					

[ ] A check in the amount of $_____ is enclosed for the fee due.

[ ] Charge $_____ to Deposit Account No. 02-4800.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800. This paper is submitted in duplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: __March 1, 2004__   By: _William C. Rowland_
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(10/03)